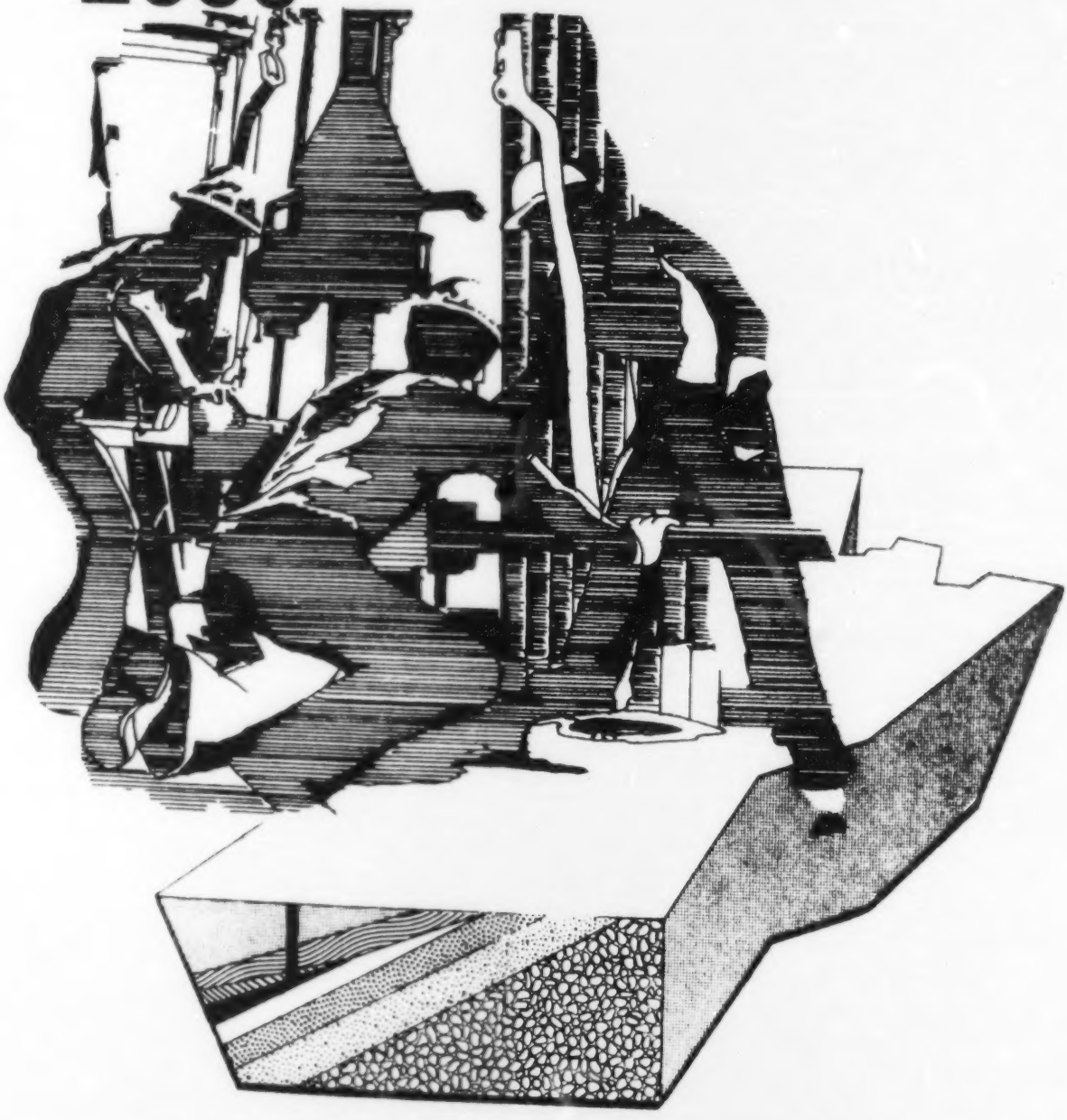
# OIL ACTIVITY REVIEW 2000



Manitoba
Industry, Trade
and Mines

Petroleum

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request.

# Manitoba Oil Activity Review

## 2000

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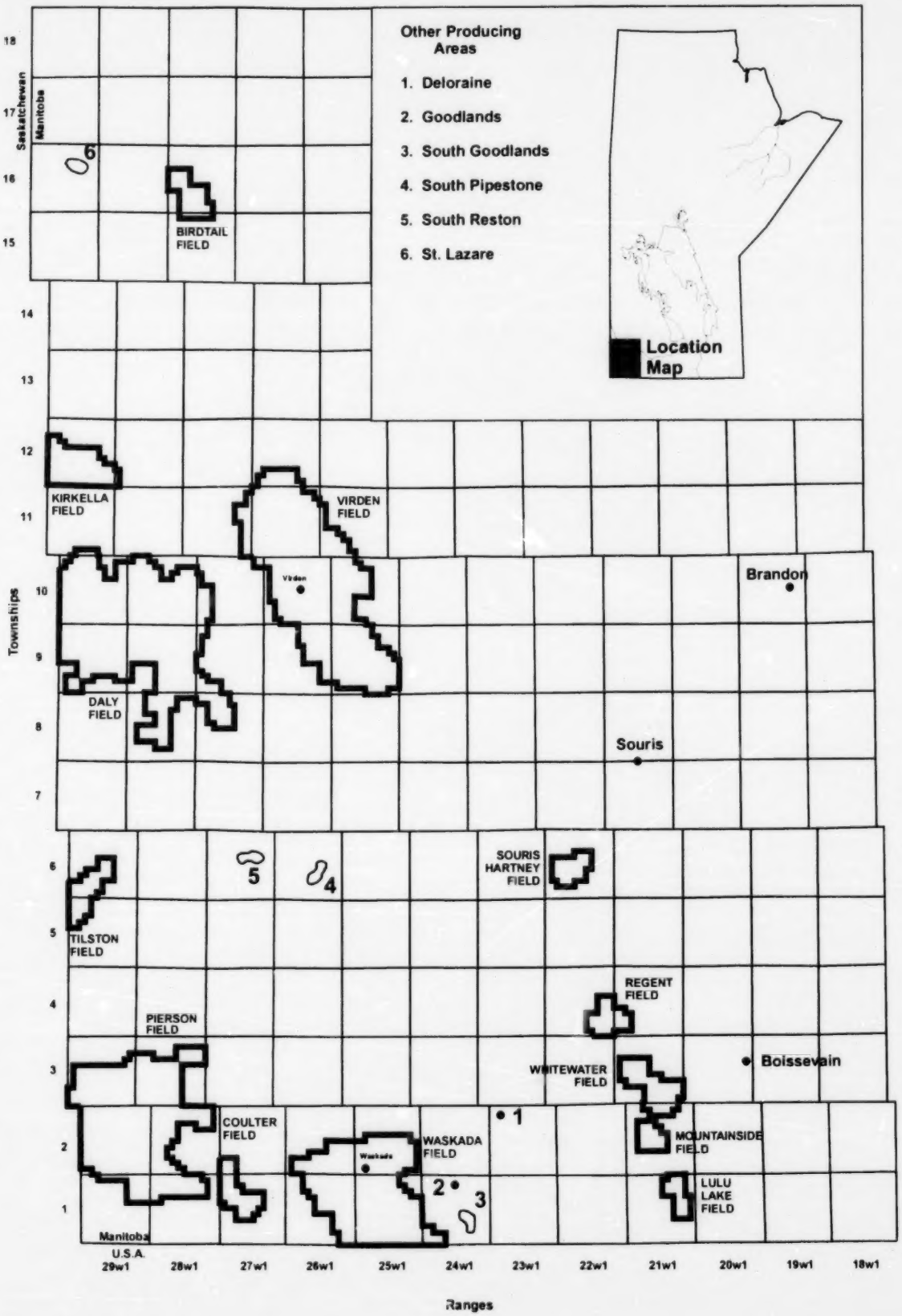
Other Producing Areas
1. Deloraine
2. Goodlands
3. South Goodlands
4. South Pipestone
5. South Reston
6. St. Lazare
Location Map
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# 2000 Highlights

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- During 2000, 68 wells were drilled in Manitoba, a 143% increase from 1999's total of 28 wells.
- Manitoba's annual oil production was up approximately 7% from 1999 production to 621 378 $m^3$.
- The value of oil produced in 2000 was approximately $163.9 million, a 72% increase from 1999.
- Provincial revenues from the oil industry (royalties, oil taxes, lease sale bonuses, rentals and fees) were $7.8 million during 2000, representing a 41% increase from 1999 ($4.8 million).
- Gross royalties payable to freehold mineral owners were estimated to be $17.9 million in 2000 (Federal and Provincial tax liabilities included).
- Surface rights owners received approximately $3.7 million from rental payments and bonuses during 2000.
- Municipal tax assessments on wells and oilfield equipment were estimated to be $39.4 million (with taxes paid amounting to approximately $2.3 million).
- Oil industry expenditures in Manitoba were estimated to be $84.8 million in 2000, a 49% increase from 1999.
- Eleven geophysical programs, including three 3-D programs, were run in 2000. Total coverage was 1134 kilometres at a cost of approximately $2.8 million.
- Four sales of Crown oil leases covering 5 173 hectares generated $514,051 in revenue to the province in 2000, a 23% increase from the 1999 total of $418,871.
- As of December 31, 2000 there were 13 oil fields and 161 non-confidential oil pools designated in the province.
- Crude oil prices fluctuated throughout the year between $29.87-53.71/bbl. In 2000, Manitoba's average crude oil selling price was $42.30/bbl, compared with 1999's average of $26.42/bbl.

# Crown Oil and Gas Dispositions

Four Crown oil and gas sales were held in 2000.

In the first lease sale, held on February 16, 2000, the average lease bonus price paid per hectare was $112.24. The average lease bonus price for the second lease sale, held on May 24, 2000 was $53.91 per hectare. The third lease sale held on August 16, 2000 had an average lease bonus price of $63.47. The fourth and final sale held on November 15, 2000 had an average lease bonus price of $106.87 (refer to table for annual sale statistics).

As of December 31, 2000, the total area of Crown oil and gas rights under disposition was 85 389 hectares all of which were held under leases. In 2000, the total area under disposition decreased by 13% compared with 1999.

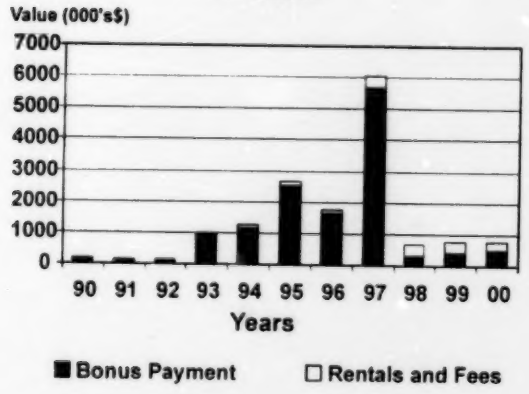
On December 31, 1982, deeper rights reversion provisions came into effect. Under these provisions, non-productive areas and rights below the producing formation revert to the Crown at the end of the first renewal of the lease term. These rights again become available for leasing by other parties interested in actively developing them.

Oil and gas leases have initial terms of five years. 2000 was the seventeenth year since lease sales were resumed in 1979 that lease holders had to surrender non-productive leases or apply for one-year extensions by paying additional rental penalties and committing to drilling programs. As a result, those leases surrendered will again be made available to other interested parties.

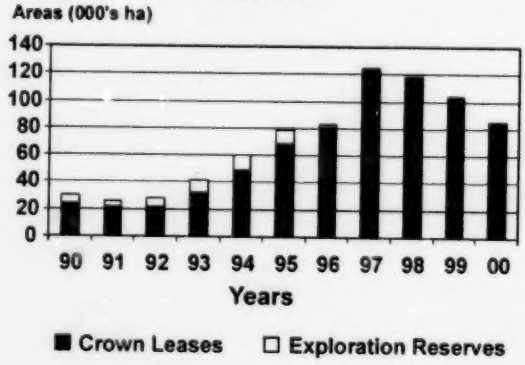
# Freehold Mineral Owner's Leasing and Revenue

Approximately 80% of the oil and gas rights in southwestern Manitoba are privately owned (freehold). Companies may negotiate leases with freehold mineral owners in areas of current interest where leases have expired or where oil and gas rights are not presently leased. Freehold mineral owners receive revenue from signing bonuses, delay rental payments and royalties when production is obtained. Freehold royalties may range from 12 1/2 to 20% of gross production sales value. It is estimated that gross royalties payable to freehold owners in 2000 were approximately $17.9 million (not including signing bonuses and delay rental payments for new and non-producing leases and before payment of provincial and federal taxes).

**Crown Lease Sales 1990-2000**




**Crown Oil Gas Rights Under Disposition (Dec. 31st) 1990-2000**



# Manitoba Crown Lease and Exploration Reservation Sale Statistics 1947-2000

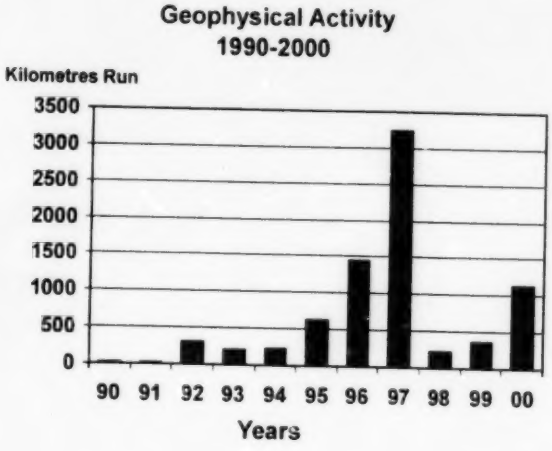
| Year | Lease Sales | | | | | | Reservation Sales | | | | | | Total Revenue From Sales ($) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Leases Sold | Area (ha) | Bonus ($) | Avg. Price ($/ha) | Highest Price ($/ha) | Lease Revenue ($) | No. of Res. Sold | Area (ha) | Bonus ($) | Avg. Price ($/ha) | Highest Price ($/ha) | Res. Revenue (4) | |
| 1947-53 | | | DATA NOT AVAILABLE | | | | | | | | | | |
| 1954 | 31 | 4 184 | 82,814 | 19.79 | 37.37 | 88,291 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 88,291 |
| 1955 | 140 | 32 247 | 579,801 | 17.98 | 62.58 | 620,751 | 1 | 8 778 | 5,854 | 0.67 | 0.67 | 6,213 | 626,964 |
| 1956 | 28 | 4 534 | 43,902 | 9.68 | 79.09 | 49,682 | 4 | 255 016 | 105,587 | 0.41 | 1.33 | 106,587 | 156,269 |
| 1957 | 16 | 4 568 | 100,373 | 21.97 | 44.71 | 106,174 | 2 | 48 820 | 3,256 | 0.07 | 0.08 | 3,756 | 109,931 |
| 1958 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 1 | 10 291 | 101 | 0.01 | 0.01 | 351 | 351 |
| 1959 | 1 | 777 | 505 | 0.65 | 0.65 | 1,475 | 2 | 11 478 | 11,879 | 1.03 | 2.42 | 12,379 | 13,854 |
| 1960 | 1 | 65 | 4,103 | 63.12 | 63.12 | 4,193 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 4,193 |
| 1961 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 4 | 50 721 | 134,099 | 2.64 | 6.75 | 135,099 | 135,099 |
| 1962 | 2 | 260 | 1,327 | 5.11 | 12.62 | 1,668 | 1 | 7 464 | 24,706 | 3.31 | 3.31 | 24,956 | 26,624 |
| 1963 | 63 | 5 055 | 31,614 | 6.25 | 17.30 | 38,468 | 1 | 3 498 | 1,608 | 0.46 | 0.46 | 1,858 | 40,326 |
| 1964 | 40 | 9 467 | 109,125 | 28.47 | 388.06 | 120,717 | 1 | 5 641 | 778 | 0.14 | 0.14 | 1,028 | 121,745 |
| 1965 | 42 | 4 347 | 40,235 | 9.26 | 77.60 | 46,024 | 15 | 92 717 | 52,672 | 0.57 | 12.11 | 56,422 | 102,446 |
| 1966 | 31 | 4 417 | 24,086 | 5.45 | 64.22 | 29,850 | 6 | 38 689 | 62,886 | 1.63 | 2.08 | 64,636 | 94,487 |
| 1967 | 10 | 2 274 | 23,537 | 10.35 | 22.25 | 26,446 | 5 | 49 846 | 55,013 | 1.10 | 3.80 | 56,263 | 82,709 |
| 1968 | 19 | 3 599 | 22,630 | 6.29 | 18.92 | 27,265 | 6 | 46 040 | 31,426 | 0.68 | 4.45 | 32,926 | 60,191 |
| 1969 | 2 | 970 | 7,164 | 7.39 | 11.94 | 8,382 | 3 | 16 453 | 75,282 | 4.58 | 7.54 | 76,032 | 84,414 |
| 1970 | 8 | 3 580 | 10,094 | 2.82 | 8.08 | 14,596 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 14,596 |
| 1971 | 2 | 1 230 | 33,673 | 27.38 | 49.75 | 34,308 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 34,308 |
| 1972-78 | | | NO SALES | | | | | | | | | | |
| 1979 | 86 | 11 064 | 897,885 | 81.15 | 315.17 | 929,855 | 3 | 4 736 | 40,888 | 8.63 | 12.23 | 47,558 | 977,413 |
| 1980 | 80 | 12 540 | 1,057,530 | 84.33 | 470.51 | 1,092,880 | 8 | 15 572 | 820,345 | 52.68 | 100.31 | 841,810 | 1,934,690 |
| 1981 | 85 | 12 312 | 1,074,958 | 87.31 | 257.26 | 1,109,988 | 5 | 5 376 | 611,199 | 113.69 | 178.43 | 619,169 | 1,729,157 |
| 1982 | 56 | 6 448 | 1,055,668 | 163.72 | 938.88 | 1,074,588 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 1,074,588 |
| 1983 | 66 | 9 255 | 1,032,267 | 111.54 | 762.34 | 1,058,705 | 1 | 1 024 | 40,192 | 39.25 | 39.25 | 41,722 | 1,100,427 |
| 1984 | 104 | 8 776 | 2,181,499 | 248.58 | 1,411.17 | 2,208,639 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 2,208,639 |
| 1985 | 173 | 15 471 | 4,215,083 | 272.45 | 1,593.78 | 4,262,410 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 4,262,410 |

# Manitoba Crown Lease and Exploration Reservation Sale Statistics 1947-2000 (cont'd)

| | Lease Sales | | | | | | Reservation Sales | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | No. of Leases Sold | Area (ha) | Bonus ($) | Avg. Price ($/ha) | Highest Price ($/ha) | Lease Revenue ($) | No. of Res. Sold | Area (ha) | Bonus ($) | Avg. Price ($/ha) | Highest Price ($/ha) | Res. Revenue (4) | Total Revenue From Sales ($) |
| 1986 | 103 | 7 904 | 891.358 | 112.77 | 602.00 | 916,268 | 1 | 768 | 20,285 | 26.41 | 26.41 | 21,495 | 937,763 |
| 1987 | 57 | 5 813 | 577,253 | 99.30 | 230.23 | 594,635 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 594,635 |
| 1988 | 29 | 3 429 | 348,439 | 101.62 | 313.07 | 358,462 | 1 | 2 112 | 84,231 | 39.88 | 39.88 | 87,121 | 445,583 |
| 1989 | 31 | 2 832 | 231,918 | 81.89 | 400.17 | 240,548 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 240,548 |
| 1990 | 20 | 1 488 | 111,930 | 75.22 | 250.00 | 116,650 | 3 | 4 128 | 49,731 | 12.05 | 21.33 | 55,641 | 172,291 |
| 1991 | 24 | 1 920 | 124,275 | 64.73 | 184.59 | 130,275 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 130,275 |
| 1992 | 43 | 3 105 | 103,135 | 33.22 | 118.61 | 113,047 | 2 | 1 855 | 17,642 | 9.51 | 12.87 | 20,460 | 133,507 |
| 1993 | 108 | 14 698 | 762,578 | 51.88 | 352.28 | 804,723 | 5 | 7 320 | 121,222 | 16.56 | 25.41 | 131,622 | 936,345 |
| 1994 | 144 | 18 404 | 1,145,663 | 62.25 | 312.50 | 1,217,167 | 3 | 2 496 | 49,393 | 19.79 | 42.97 | 53,263 | 1,270,430 |
| 1995 | 167 | 23 053 | 2,517,164 | 109.19 | 316.75 | 2,664,649 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 2,664,649 |
| 1996 | 111 | 12 131 | 1,692,342 | 135.51 | 1305.71 | 1,779,202 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 1,779,202 |
| 1997 | 434 | 49 969 | 5,694,789 | 113.97 | 874.10 | 6,043,275 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 6,043,275 |
| 1998 | 54 | 4 220 | 308,085 | 73.01 | 571.50 | 344,454 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 344,454 |
| 1999 | 23 | 4 058 | 395,470 | 97 45 | 333.44 | 418,871 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 418,871 |
| 2000 | 58 | 5 173 | 472,747 | 91.39 | 112.24 | 514,051 | 0 | 0 | 0 | 0.00 | 0.00 | 0 | 514,051 |
| Total | 2492 | 315 637 | 28,007,019 | 88.73 | N/A | 29,211,632 | 84 | 690 839 | 2,420,275 | 3.50 | N/A | 2,498,367 | 31,710,001 |

# Geophysical Activity

Eleven geophysical programs were run in 2000 covering 1 134 km. There were three 3-D programs run accounting for 50% of total seismic run. The estimated cost of all programs was $2,761,042.




**MANITOBA GEOPHYSICAL ACTIVITY**

**SUMMARY 1975-2000**

| Year | Licenses Issued | Kilometres Run (km) | Total Program Costs $ |
|---|---|---|---|
| 1975 | 1 | 270 | 106,500 |
| 1976 | 3 | 112 | 118,302 |
| 1977 | 2 | 830 | 1,046,220 |
| 1978 | 5 | 1 828 | 3,451,370 |
| 1979 | 10 | 2 001 | 2,970,734 |
| 1980 | 10 | 851 | 1,843,438 |
| 1981 | 11 | 1 148 | 2,116,854 |
| 1982 | 19 | 879 | 1,805,512 |
| 1983 | 14 | 3 410 | 3,639,692 |
| 1984 | 23 | 2 731 | 5,547,086 |
| 1985 | 25 | 1 647 | 3,081,241 |
| 1986 | 8 | 338 | 1,227,227 |
| 1987 | 13 | 683 | 2,713,000 |
| 1988 | 13 | 2 148 | 2,129,550 |
| 1989 | 2 | 39 | 114,627 |
| 1990 | 2 | 30 | 118,452 |
| 1991 | 2 | 15 | 62,032 |
| 1992 | 8 | 299 | 370,198 |
| 1993 | 9 | 202 | 225,776 |
| 1994 | 14 | 222 | 890,307 |
| 1995 | 16 | 633 | 1,634,771 |
| 1996 | 30 | 1 457 | 5,480,000 |
| 1997 | 32 | 3 239 | 6,098,000 |
| 1998 | 13 | 212 | 619,072 |
| 1999 | 2 | 354 | 269,724 |
| 2000 | 13 | 1 134 | 2,761,042 |

# Summary of 2000 Geophysical Programs

| Geophysical Licence No. | Licensee | Contractor | Area | Type | Km Run |
|---|---|---|---|---|---|
| 428 | Renaisance Energy Ltd. | Veritas Geophysical Ltd. | Manson | 3D | 376.97 |
| 429 | 532322 Alberta Ltd. | Data Trek Exploration (1986) Ltd. | Riding Mountain | 2D | 327.1 |
| 430 | Wascana Energy Inc. | Veritas Geophysical Ltd. | Pipestone | 2D | 3.3 |
| 431 | Tundra Oil and Gas Ltd. | Polaris Explorer Ltd./Synterra Technologies Ltd. | Kola | 3D | 106.3 |
| 432 | Tundra Oil and Gas Ltd. | Polaris Explorer Ltd./Synterra Technologies Ltd. | Waskada | 3D | 84.45 |
| 433 | Helmsman Resources Ltd. | Polaris Explorer Ltd. | Tilston | 2D | 9.5 |
| 434 | Progress Energy Ltd. | Absolute Exploration Services Ltd. | Kirkella | 2D | 0.595 |
| 435 | Tri Link Resources Ltd. | Absolute Exploration Services Ltd. | Two Creeks | 2D | 167.25 |
| 436 | Rideau Petroleums Ltd. | Absolute Exploration Services Ltd. | Daly | 2D | 26.625 |
| 437 | Rideau Petroleums Ltd. | Absolute Exploration Services Ltd. | Pierson | 2D | 3.20 |
| 438 | Barrington Petroleum Ltd. | Data Trek Exploration (1986) Ltd. | Kirkella | 2D | 28.68 |
| *439 | Rideau Petroleums Ltd. | ---------- | Daly | 2D | ---- |
| **440 | ---------- | ---------- | ---------- | --- | ---- |
| *441 | 532322 Alberta Ltd. | Data Trek Exploration (1986) Ltd. | Riding Mountain | 2D | ---- |
| | | | | **Total** | **1134.0** |

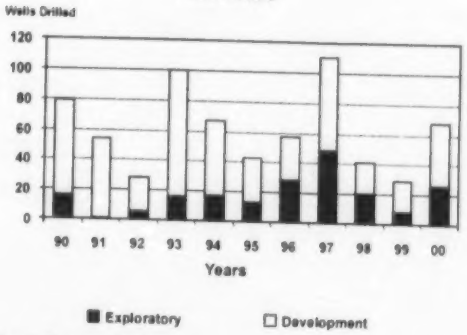
* Programs licenced in 2000, run in 2001

** Program licenced in 2001

# Drilling Activity

Drilling activity in Manitoba was up over 1999 levels. In 2000, 82 drilling licenses were issued, resulting in 10 different companies drilling 68 wells, an increase of 134%. Five drilling contractors drilled 71 716 metres of hole for an average well depth of 1 055 m.

**Wells Drilled in Manitoba**
**1990-2000**




# Drilling Activity by Area

| Field | TWP | RGE WPM | Wells Drld. | Development Drld. | Development POW | Exploratory Drld. | Exploratory POW | Total POW | Dry/ Abd | Other |
|---|---|---|---|---|---|---|---|---|---|---|
| Daly | 8-10 | 27-29 | 5 | 5 | 5 | 0 | 0 | 5 | 0 | 0 |
| Waskada | 1/2 | 25/26 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| Virden | 9-12 | 25/26 | 12 | 12 | 12 | 0 | 0 | 12 | 0 | 0 |
| Whitewater | 3 | 21 | 7 | 7 | 6 | 0 | 0 | 6 | 1 | 0 |
| Pierson | 2/3 | 28/29 | 5 | 4 | 3 | 1 | 0 | 3 | 2 | 0 |
| Kirkella | 12 | 29 | 8 | 6 | 6 | 2 | 1 | 7 | 1 | 0 |
| Birdtail | 16 | 27 | 4 | 4 | 4 | 0 | 0 | 4 | 0 | 0 |
| Other Areas | | | 25 | 3 | 2 | 22 | 1 | 3 | 22 | 0 |
| **Total** | | | **68** | **42** | **39** | **26** | **2** | | | |
| % of Total Drilled | | | | **62** | | **38** | | | | |

POW – Potential Oil Wells

# 2000 Drilling Statistics by Operator and Contractor

| Wells Drilled by Operator | 2000 | 1999 |
|---|---|---|
| Tundra Oil and Gas Ltd. | 18 | 14 |
| Township Land Co. Ltd. | 14 | - |
| Renaissance Energy Ltd. | 9 | 11 |
| Chevron Canada Resources | 8 | - |
| Progress Energy Ltd. | 6 | - |
| EOG Resources Canada Inc. | 6 | - |
| Kiwi Resources Ltd. | 3 | - |
| NCE Petrofund Corp. | 2 | - |
| Anderson Exploration Ltd. | 1 | - |
| Player Resources Ltd. | 1 | - |
| Zargon Oil and Gas Ltd. | - | 2 |
| Upton Resources Inc. | - | 1 (STH) |
| Rigel Oil & Gas Ltd. | - | 1 |
| **Total** | **68** | ***29** |

| Wells Drilled by Contractor | 2000 | 1999 |
|---|---|---|
| Precision Drilling (1987) Ltd. | 25 | 11 |
| Trinidad Drilling Ltd. | 21 | 5 |
| Ensign Drilling Inc. | 9 | 1 |
| Big Sky Drilling Ltd. | 7 | 3 |
| SDS Drilling | 6 | - |
| Can-Am Drilling Ltd. | - | 9 |
| **Total** | **68** | ***29** |

* includes one structure test hole

# Drilling Success Percentages
# 1981-2000

| Year | Development Wells | | Exploratory Wells | | All Wells | |
|---|---|---|---|---|---|---|
| | Drilled | % Successful | Drilled | % Successful | Drilled | % Successful |
| 1981 | 29 | 100 | 33 | 55 | 62 | 76 |
| 1982 | 117 | 95 | 78 | 67 | 195 | 84 |
| 1983 | 187 | 95 | 60 | 77 | 247 | 91 |
| 1984 | 210 | 95 | 36 | 44 | 246 | 88 |
| 1985 | 209 | 92 | 52 | 69 | 261 | 87 |
| 1986 | 90 | 95 | 43 | 91 | 133 | 93 |
| 1987 | 74 | 93 | 33 | 61 | 107 | 83 |
| 1988 | 53 | 85 | 18 | 17 | 71 | 68 |
| 1989 | 45 | 96 | 7 | 14 | 52 | 85 |
| 1990 | 63 | 94 | 15 | 73 | 78 | 90 |
| 1991 | 53 | 89 | 1 | 100 | 54 | 89 |
| 1992 | 22 | 82 | 6 | 33 | 28 | 71 |
| 1993 | 73 | 90 | 14 | 78 | 87 | 90 |
| 1994 | 50 | 96 | 17 | 41 | 67 | 82 |
| 1995 | 30 | 83 | 13 | 23 | 43 | 65 |
| 1996 | 29 | 83 | 28 | 50 | 57 | 68 |
| 1997 | 61 | 79 | 48 | 42 | 109 | 62 |
| 1998 | 21 | 95 | 20 | 45 | 41 | 71 |
| 1999 | 20 | 100 | 8 | 50 | 28 | 86 |
| 2000 | 42 | 93 | 26 | 8 | 68 | 60 |

# Well Licence Transfers in 2000

In 2000 there were 70 wells transferred from one operator to another. Most of the wells transferred were in the Waskada and Virden Fields. Falcon Oil & Gas became the new operator of Waskada Unit No. 15. Tri Link Resources Ltd. changed it's name to National Fuel Exploration Corp.

| Previous Operator | New Operator | Field/Area | No. of Wells |
|---|---|---|---|
| NCE Petrofund Corp. | Falcon Oil & Gas Ltd. | Waskada | 36 |
| Talisman Energy Inc. | Canada West Resources Inc. | Bernice | 1 |
| | | South Pipestone | 11 |
| Tri Link Resources Ltd. | National Fuel Exploration Corp. | Daly | 2 |
| | | Hargrave | 2 |
| | | Waskada | 1 |
| | | Virden | 6 |
| Upton Resources Inc. | Progress Energy Ltd. | Virden | 11 |
| | | **Total** | 70 |

# Drilling Activity 1951-2000

| Year | Licenses Issued | Wells* Drilled | Well Classification | | Oil and Gas Wells Completed Status | | | Metres* Drilled | Other** Wells Drilled |
|---|---|---|---|---|---|---|---|---|---|
| | | | E | D | PO | AD | S | | |
| Pre 1951 | 15 | | | | | | | | |
| 1951 | 123 | 18 | 14 | 4 | 8 | 10 | 2 | 14 956 | 103 |
| 1952 | 104 | 68 | 40 | 28 | 25 | 33 | 10 | 58 344 | 33 |
| 1953 | 127 | 102 | 31 | 71 | 73 | 29 | 0 | 76 682 | 9 |
| 1954 | 333 | 310 | 114 | 196 | 217 | 90 | 3 | 233 170 | 0 |
| 1955 | 382 | 354 | 57 | 297 | 279 | 66 | 9 | 254 774 | 5 |
| 1956 | 283 | 248 | 30 | 218 | 202 | 38 | 8 | 176 994 | 14 |
| 1957 | 225 | 224 | 71 | 153 | 139 | 85 | 0 | 155 469 | 2 |
| 1958 | 92 | 92 | 16 | 76 | 61 | 31 | 0 | 60 430 | 0 |
| 1959 | 50 | 47 | 16 | 31 | 30 | 17 | 0 | 30 792 | 2 |
| 1960 | 65 | 66 | 12 | 54 | 50 | 15 | 1 | 43 918 | 0 |
| 1961 | 26 | 28 | 11 | 17 | 11 | 16 | 1 | 17 389 | 1 |
| 1962 | 30 | 24 | 3 | 21 | 15 | 9 | 0 | 17 683 | 2 |
| 1963 | 59 | 57 | 9 | 48 | 39 | 16 | 2 | 43 451 | 0 |
| 1964 | 110 | 104 | 32 | 72 | 68 | 35 | 1 | 75 303 | 3 |
| 1965 | 79 | 65 | 40 | 25 | 27 | 38 | 0 | 50 298 | 10 |
| 1966 | 76 | 63 | 33 | 30 | 29 | 33 | 1 | 54 863 | 9 |
| 1967 | 90 | 85 | 42 | 43 | 44 | 41 | 0 | 67 068 | 0 |
| 1968 | 64 | 59 | 44 | 15 | 27 | 32 | 0 | 48 840 | 3 |
| 1969 | 98 | 46 | 30 | 16 | 14 | 29 | 3 | 34 376 | 38 |
| 1970 | 18 | 18 | 13 | 5 | 2 | 16 | 0 | 16 253 | 1 |
| 1971 | 24 | 15 | 6 | 9 | 2 | 8 | 5 | 13 026 | 6 |
| 1972 | 11 | 9 | 6 | 3 | 0 | 7 | 2 | 6 778 | 1 |
| 1973 | 19 | 17 | 17 | 0 | 0 | 17 | 0 | 14 083 | 0 |
| 1974 | 22 | 21 | 17 | 4 | 6 | 14 | 1 | 22 710 | 1 |
| 1975 | 9 | 7 | 7 | 0 | 2 | 4 | 1 | 6 716 | 4 |
| 1976 | 16 | 15 | 13 | 1 | 3 | 11 | 1 | 11 161 | 2 |
| 1977 | 21 | 11 | 10 | 1 | 9 | 2 | 0 | 9 359 | 2 |
| 1978 | 16 | 22 | 12 | 10 | 10 | 6 | 6 | 18 329 | 0 |
| 1979 | 27 | 25 | 9 | 16 | 16 | 9 | 0 | 20 537 | 0 |
| 1980 | 33 | 27 | 12 | 15 | 18 | 9 | 0 | 23 508 | 6 |
| 1981 | 76 | 62 | 33 | 29 | 47 | 15 | 0 | 61 011 | 5 |
| 1982 | 201 | 195 | 78 | 117 | 164 | 30 | 1 | 184 282 | 0 |
| 1983 | 290 | 247 | 60 | 187 | 223 | 24 | 0 | 229 304 | 5 |
| 1984 | 249 | 246 | 36 | 210 | 218 | 28 | 0 | 220 631 | 0 |
| 1985 | 313 | 261 | 52 | 209 | 229 | 29 | 3 | 228 387 | 7 |
| 1986 | 116 | 134 | 44 | 90 | 122 | 11 | 1 | 118 675 | 1 |
| 1987 | 116 | 107 | 33 | 74 | 90 | 17 | 0 | 96 970 | 0 |
| 1988 | 78 | 72 | 18 | 54 | 48 | 23 | 1 | 63 722 | 0 |
| 1989 | 54 | 52 | 7 | 45 | 44 | 8 | 0 | 42 948 | 0 |
| 1990 | 93 | 79 | 16 | 63 | 70 | 8 | 1 | 75 751 | 0 |
| 1991 | 51 | 54 | 1 | 53 | 48 | 6 | 0 | 48 698 | 0 |
| 1992 | 28 | 28 | 7 | 21 | 20 | 8 | 0 | 27 391 | 0 |
| 1993 | 102 | 87 | 13 | 74 | 78 | 9 | 0 | 90 343 | 0 |
| 1994 | 82 | 67 | 17 | 50 | 55 | 11 | 1 | 77 716 | 0 |
| 1995 | 56 | 43 | 13 | 30 | 29 | 14 | 0 | 50 591 | 0 |
| 1996 | 82 | 57 | 28 | 29 | 40 | 17 | 0 | 60 723 | 0 |
| 1997 | 129 | 109 | 48 | 61 | 68 | 39 | 2 | 108 040 | 0 |
| 1998 | 41 | 41 | 20 | 21 | 29 | 12 | 0 | 48 908 | 0 |
| 1999 | 31 | 28 | 8 | 20 | 24 | 4 | 0 | 38 224 | 1 |
| 2000 | 82 | 68 | 26 | 42 | 41 | 27 | 0 | 71 716 | 0 |
| TOTAL | 4 917 | 4 284 | 1 375 | 2 908 | 3 111 | 1 106 | 67 | 3 621 298 | 276 |

* Excludes other wells drilled

** Other wells drilled includes: structure test holes, potash test holes, gas storage wells, helium

E - Exploratory

D - Development

PO - Potential Oil

AD - Abandoned Dry

S - Service

# Exploratory* Wells Drilled in Manitoba by Formation 1974-2000

## (Geological Period of Formation Drilled Into)

| Year | Cretaceous | Jurassic | Mississippian | Devonian | Silurian | Ordovician | Cambrian | Precambrian | Total |
|---|---|---|---|---|---|---|---|---|---|
| 1974 | 1 | -- | 5 | -- | -- | -- | -- | 12 | 18 |
| 1975 | 1 | -- | 4 | 1 | -- | 4 | -- | 1 | 11 |
| 1976 | -- | -- | 5 | 7 | -- | -- | -- | -- | 12 |
| 1977 | -- | -- | 10 | -- | -- | -- | -- | -- | 10 |
| 1978 | -- | -- | 9 | 1 | -- | 1 | -- | 1 | 12 |
| 1979 | -- | -- | 6 | 1 | -- | -- | -- | 2 | 9 |
| 1980 | -- | -- | 8 | 1 | 1 | -- | -- | 1 | 11 |
| 1981 | -- | -- | 21 | 6 | -- | -- | -- | 5 | 32 |
| 1982 | -- | -- | 72 | 5 | -- | -- | -- | 1 | 78 |
| 1983 | -- | 1 | 48 | 9 | 1 | -- | -- | 1 | 60 |
| 1984 | 1 | -- | 32 | 2 | -- | -- | -- | 1 | 36 |
| 1985 | -- | -- | 49 | 2 | -- | -- | -- | 1 | 52 |
| 1986 | -- | -- | 30 | 13 | -- | -- | -- | -- | 43 |
| 1987 | -- | -- | 13 | 19 | 1 | -- | -- | -- | 33 |
| 1988 | 3 | -- | 9 | 6 | -- | -- | -- | -- | 18 |
| 1989 | -- | 1 | 2 | 3 | 1 | -- | -- | -- | 7 |
| 1990 | -- | -- | 15 | -- | -- | -- | -- | -- | 15 |
| 1991 | -- | -- | 1 | -- | -- | -- | -- | -- | 1 |
| 1992 | -- | -- | 2 | 3 | -- | -- | -- | 1 | 6 |
| 1993 | -- | 2 | 9 | 2 | -- | -- | -- | 1 | 14 |
| 1994 | -- | -- | 11 | 5 | -- | -- | -- | 1 | 17 |
| 1995 | -- | -- | 9 | 4 | -- | -- | -- | -- | 13 |
| 1996 | -- | -- | 14 | 14 | -- | -- | -- | -- | 28 |
| 1997 | -- | 2 | 19 | 21 | 1 | 3 | - | 2 | 48 |
| 1998 | -- | -- | 6 | 14 | -- | -- | -- | -- | 20 |
| 1999 | -- | -- | 4 | 3 | -- | -- | -- | 1 | 8 |
| 2000 | -- | 13 | 5 | 5 | 1 | -- | -- | 2 | 26 |
| **Total** | **6** | **19** | **418** | **147** | **6** | **8** | **-** | **34** | **638** |

* Exploratory - includes outpost, new field wildcat, new pool wildcat and deeper pool wildcat classifications.

# Horizontal Wells Drilled in Manitoba 2000

| Field | Surface Location | Bottom Hole Location | Horizontal Length(m) | Licensee | Initial Production* ($m^3/d$) | Status |
|---|---|---|---|---|---|---|
| Daly | 8D-30-10-28 | 4D-30-10-28 | 903 | Tundra Oil and Gas Ltd. | 34.3 (4 months) | COOP |
| | 4B-32-10-28 | 6C-32-10-29 | 580 | Tundra Oil and Gas Ltd. | 3.5 (3 months) | COOP |
| | | 5C-32-10-29 | 393** | | | |
| Virden | 3B-29-9-25 | 11C-29-9-25 | 924 | Tundra Oil and Gas Ltd. | 23.7 | COOP |
| | 9B-33-11-26 | 2B-33-11-26 | 583 | Chevron Canada Resources | 37.5 (3 months) | COOP |
| | 4B-14-11-26 | 7D-15-11-26 | 583 | Chevron Canada Resources | 15.2 (3 months) | COOP |
| | 2A-21-11-26 | 7C-21-11-26 | 656 | Chevron Canada Resources | 13.3 (3 months) | COOP |
| | 10B-26-11-26 | 12D-26-11-26 | 435 | Chevron Canada Resources | --- | ABD D |
| | | 12D-26-11-26 | 353** | | 2.5 (2 months) | COOP |
| | 4B-27-11-26 | 16A-21-11-26 | 423 | Chevron Canada Resources | 28.7 (2 months) | COOP |
| | | 15D-21-11-26 | 394** | | | |
| | 12D-29-11-26 | 15A-30-11-26 | 724 | Tundra Oil and Gas Ltd. | 16.0 | COOP |
| | | 9C-30-11-26 | 500** | | | |
| | 4B-29-11-26 | 12B-20-11-26 | 567 | Progress Energy Ltd. | --- | COMP |
| | 12A-20-11-26 | 13D-20-11-26 | 552 | Progress Energy Ltd. | --- | COMP |
| | 2D-4-12-26 | 5D-4-12-26 | 689 | Chevron Canada Resources | 6.8 (2 months) | COOP |
| | 8A-4-12-26 | 6A-3-12-26 | 645 | Chevron Canada Resources | 8.1 (1 month) | COOP |
| | 8A-4-12-26 | 6A-4-12-26 | 631 | Chevron Canada Resources | 17.0 (3 months) | COOP |
| Whitewater | 16D-33-2-21 | 9B-33-2-21 | 651 | Tundra Oil and Gas Ltd. | 32.7 (5 months) | COOP |
| | 9A-17-3-21 | A2B-17-3-21 | 858 | Tundra Oil and Gas Ltd. | 21.7 (5 months) | COOP |
| | 14A-17-3-21 | 1A-20-3-21 | 672 | Tundra Oil and Gas Ltd. | 5.1 | COOP |
| | 8D-17-3-21 | 2A-17-3-21 | 675 | Tundra Oil and Gas Ltd. | 30.8 | COOP |
| | | 1B-17-3-21 | 527** | | | |
| Pierson | 14B-9-2-29 | 12B-9-2-29 | 509 | Anderson Exploration Ltd. | --- | COMP |
| | 13B-6-3-29 | 5D-6-3-29 | 444 | Tundra Oil and Gas Ltd. | 10.3 (5 months) | COOP |
| | | 11B-6-3-29 | 447** | | | |
| | 11C-17-3-28 | 12B-16-3-28 | 1147 | Tundra Oil and Gas Ltd. | 14.2 | COOP |
| Other Areas | 15A-9-6-26 | REA14B-9-6-26*** | 395 | Canada West Resources Inc. | 0.5 | COOP |
| | 8D-31-2-23 | 13C-32-2-23 | 786 | Tundra Oil and Gas Ltd. | 29.8 (2 months) | COOP |

* Average oil rate for first six months (or less) of production

** Second Leg

*** Re-entry of abandoned horizontal well

# Areas of Activity

### Virden

In 2000, the Virden Field was the most active area in the Province with 12 wells, all horizontal, being drilled.

### Kirkella

In 2000, there were 8 wells drilled in the Kirkella Field of which 6 were vertical wells and 2 were directional wells.

### Whitewater

There were 7 wells drilled and 2 wells re-entered of which 1 was converted to a salt water disposal well in 2000.

### Daly

In 2000, there were 5 wells drilled of which 2 were drilled horizontally. There were also 8 wells deepened to test the Bakken Formation.

### Other Areas

There were 25 wells, including 1 horizontal well, drilled in other areas in 2000. Of the 25 wells drilled 22 were classified as exploratory.

## Non-Abandoned Wells 2000

| Field | Active[1] Oil Producers | Active[2] Other Wells |
|---|---|---|
| Daly | 334 | 54 |
| Tilston | 22 | 3 |
| Waskada | 235 | 68 |
| Lulu Lake | 4 | 2 |
| Virden | 461 | 137 |
| Whitewater | 33 | 3 |
| Pierson | 137 | 38 |
| Kirkella | 35 | 5 |
| Souris Hartney | 5 | 4 |
| Coulter | 3 | 0 |
| Regent | 6 | 1 |
| Mountainside | 13 | 1 |
| Birdtail | 18 | 2 |
| Confidential Wells | 5 | 1 |
| Other Areas | 26 | 7 |
| **Total** | **1337** | **326** |

Notes.

(1) Wells classified as capable of oil production at year end that produced oil in 2000. Dual completions or commingled wells count as one well.

(2) Includes Water Injection, Salt Water Disposal, Water Supply, Gas Injection and Other Wells.

# Production and Markets

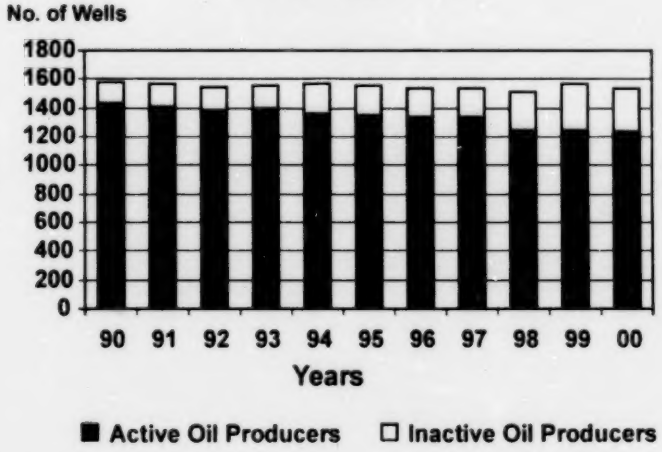
Annual oil production in Manitoba was up 7% from 1999 to 621 378 $m^3$ (3.9 million barrels).

Oil production from the Virden, Daly, Pierson and Waskada Fields accounted for 33%, 19%, 14% and 12% respectively of Manitoba's total production.

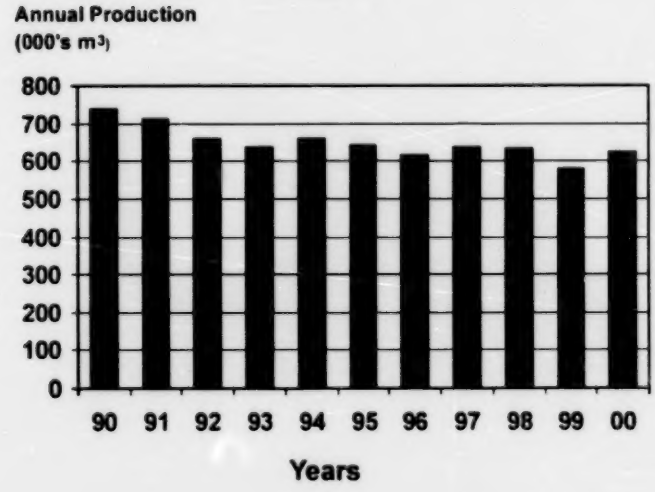
In 2000, a number of fields showed an increase in production over 1999 including Regent (117%), Whitewater (241%), and Kirkella (106%).

Of the total amount of oil purchased by refiners, approximately 13% was refined in Ontario and 87% went to refineries in the United States.

**Oil Wells in Manitoba**
**1990-2000**




**Manitoba Crude Oil Production**
**1990-2000**



# Disposition of Manitoba Produced Crude Oil 1960-2000 ($m^3$)*

| Year | Manitoba** | Ontario | Quebec | USA | Total |
|---|---|---|---|---|---|
| 1951-59 | | | Data Not Available | | |
| 1960 | 371 732 | 321 440 | - | 79 611 | 772 783 |
| 1961 | 148 029 | 573 637 | - | - | 721 666 |
| 1962 | 74 471 | 558 567 | - | 6 420 | 639 458 |
| 1963 | 94 452 | 533 598 | - | - | 628 050 |
| 1964 | 164 326 | 539 152 | - | - | 703 478 |
| 1965 | 82 651 | 701 955 | - | - | 784 606 |
| 1966 | 22 572 | 564 797 | - | 263 011 | 850 380 |
| 1967 | 27 417 | 416 097 | - | 476 577 | 920 091 |
| 1968 | 30 180 | 455 207 | - | 524 570 | 1 009 957 |
| 1969 | 31 323 | 620 216 | - | 351 918 | 1 003 457 |
| 1970 | 30 011 | 408 452 | - | 515 769 | 954 232 |
| 1971 | 24 539 | 388 389 | - | 490 412 | 903 340 |
| 1972 | 24 270 | 378 571 | - | 465 552 | 868 393 |
| 1973 | 273 687 | 95 745 | - | 455 093 | 824 525 |
| 1974 | 449 887 | 60 934 | - | 252 605 | 763 426 |
| 1975 | 383 383 | 312 397 | - | 12 596 | 708 376 |
| 1976 | 82 747 | 535 162 | - | 34 356 | 652 265 |
| 1977 | 21 877 | 609 298 | - | 41 309 | 672 484 |
| 1978 | 53 162 | 552 889 | - | 40 450 | 646 501 |
| 1979 | 33 258 | 549 524 | - | 48 261 | 631 043 |
| 1980 | 92 921 | 444 319 | 19 026 | 55 378 | 611 644 |
| 1981 | 180 402 | 189 659 | 150 177 | 57 702 | 577 940 |
| 1982 | - | 331 564 | 371 331 | 57 465 | 760 360 |
| 1983 | 81 887 | 258 611 | 380 911 | 71 544 | 792 953 |
| 1984 | - | 550 489 | 198 168 | 90 874 | 839 531 |
| 1985 | - | 245 364 | 483 508 | 211 331 | 940 203 |
| 1986 | - | 300 446 | 175 962 | 499 997 | 976 405 |
| 1987 | - | 349 807 | 113 418 | 464 806 | 928 031 |
| 1988 | - | 276 170 | 187 639 | 470 401 | 934 210 |
| 1989 | - | 428 731 | 178 744 | 272 305 | 879 780 |
| 1990 | - | 430 792 | 11 704 | 425 106 | 867 602 |
| 1991 | - | 412 502 | - | 341 138 | 753 640 |
| 1992 | - | 513 777 | - | 329 131 | 842 908 |
| 1993 | - | 296 994 | - | 390 765 | 687 759 |
| 1994 | - | 148 303 | - | 503 869 | 652 172 |
| 1995 | - | 224 341 | - | 367 332 | 591 673 |
| 1996 | - | 164 145 | - | 500 755 | 664 900 |
| 1997 | - | 216 325 | - | 652 173 | 868 498 |
| 1998 | - | 165 296 | - | 584 898 | 750 194 |
| 1999 | - | 104 461 | - | 718 492 | 822 953 |
| 2000 | - | 67 027 | - | 894 648 | 961 675 |

* Includes some oil produced in Saskatchewan and transported into Manitoba.

** Manitoba's last refinery (Shell St. Boniface) closed in 1983.

# Manitoba's Top 25 Oil Producers

| Rank | Operator | 2000 | | 1999* | | 2000/1999 Increase (decrease) | |
|---|---|---|---|---|---|---|---|
| | | $m^3$ | % of Total | $m^3$ | % of Total | $m^3$ | % Change |
| 1 | Tundra Oil and Gas Ltd. | 190 007.3 | 30.8 | 180 245.4 | 31.2 | 9 761.9 | 5.4 |
| 2 | Chevron Canada Resources Limited | 186 100.6 | 30.1 | 186 882.0 | 32.4 | (781.4) | (0.4) |
| 3 | Home Oil Company Limited | 43 126.3 | 7.0 | 43 279.6 | 7.5 | (153.3) | (0.4) |
| 4 | NCE Resources | 41 589.2 | 6.7 | 42 228.1 | 7.3 | (638.9) | (1.5) |
| 5 | EOG Resources Canada Inc. | 39 926.7 | 6.5 | 42 281.3 | 7.3 | (2 354.6) | (5.6) |
| 6 | Husky Oil Operations Limited | 28 671.4 | 4.6 | 12 323.8 | 2.1 | 16 347.6 | 132.7 |
| 7 | Mountcliff Resource Limited | 17 846.5 | 2.9 | 8 555.0 | 1.5 | 9 291.5 | 108.6 |
| 8 | Rideau Petroleums Ltd. | 14 114.8 | 2.3 | 10 359.8 | 1.8 | 3 755.0 | 36.2 |
| 9 | Progress Energy Ltd. | 10 453.1 | 1.7 | 9 898.4 | 1.7 | 554.7 | 5.6 |
| 10 | Kiwi Resources Ltd. | 9 851.7 | 1.6 | 9 243.4 | 1.6 | 608.3 | 6.6 |
| 11 | Zargon Oil & Gas Ltd. | 9 406.5 | 1.5 | 8 871.1 | 1.5 | 535.4 | 6.0 |
| 12 | Canadian Natural Resources Limited | 4 704.4 | 0.8 | 4 738.1 | 0.8 | (33.7) | (0.7) |
| 13 | Cosens Drilling Limited | 3 689.6 | 0.6 | 3 653.1 | 0.6 | 36.5 | 1.0 |
| 14 | Alliance Energy Inc. | 3 380.2 | 0.5 | 290.8 | 0.1 | 3 089.4 | 1062.4 |
| 15 | Geolock Resources Limited | 3 126.6 | 0.5 | 3 779.2 | 0.7 | (652.6) | (17.3) |
| 16 | Neutrino Resources Inc. | 2 985.2 | 0.5 | 3 011.8 | 0.5 | (26.6) | (0.9) |
| 17 | Leader Resources Limited | 1 531.5 | 0.2 | 1 337.9 | 0.2 | 193.6 | 14.5 |
| 18 | Centoba Oils Limited | 1 138.7 | 0.2 | 1 099.3 | 0.2 | 39.4 | 3.6 |
| 19 | Mead Petroleums & Farms Ltd. | 1 102.1 | 0.2 | 1 463.7 | 0.3 | (361.6) | (24.7) |
| 20 | Antler River Resources Ltd. | 949.0 | 0.2 | 765.3 | 0.1 | 183.7 | 24.0 |
| 21 | Renaissance Energy Ltd. | 908.4 | 0.1 | 494.8 | 0.1 | 413.6 | 83.6 |
| 22 | Gerrand Enterprises Ltd. | 860.6 | 0.1 | 888.2 | 0.2 | (27.6) | (3.1) |
| 23 | Falcon Oil & Gas Ltd. | 798.0 | 0.1 | 409.4 | 0.1 | 388.6 | 94.9 |
| 24 | 2928419 Manitoba Limited | 742.1 | 0.1 | 744.0 | 0.1 | (1.9) | (0.3) |
| 25 | National Fuel Exploration Corp. | 713.2 | 0.1 | 812.2 | 0.1 | (99.0) | (12.2) |

* Oil production figures may vary year to year due to well transfers and company mergers.

# Manitoba Oil and Water Production
# 1951-2000

| Year | Wells Capable of Producing (December) | Wells Producing (December) | Oil Prod. ($m^3$) | Water Prod. ($m^3$) | Total Fluid Prod. ($m^3$) | Avg. Water Cut(%) | Avg. Oil Prod. ($m^3$/day) |
|---|---|---|---|---|---|---|---|
| 1951 | 5 | 5 | 1 854 | 152 | 2 006 | 7.6 | 5.1 |
| 1952 | 39 | 32 | 17 022 | 4 068 | 21 090 | 19.3 | 46.6 |
| 1953 | 105 | 93 | 104 193 | 50 614 | 154 807 | 32.7 | 285.5 |
| 1954 | 284 | 269 | 341 410 | 112 226 | 453 636 | 24.7 | 935.4 |
| 1955 | 554 | 486 | 658 802 | 160 092 | 818 894 | 19.5 | 1 804.9 |
| 1956 | 736 | 647 | 919 539 | 754 908 | 1 674 447 | 45.1 | 2 512.4 |
| 1957 | 846 | 739 | 967 721 | 1 709 792 | 2 677 513 | 63.9 | 2 651.3 |
| 1958 | 877 | 736 | 926 322 | 1 183 122 | 2 109 444 | 56.1 | 2 537.9 |
| 1959 | 875 | 730 | 803 461 | 1 273 632 | 2 077 093 | 61.3 | 2 201.3 |
| 1960 | 893 | 755 | 757 054 | 1 400 880 | 2 157 934 | 64.9 | 2 068.5 |
| 1961 | 874 | 729 | 711 969 | 1 510 627 | 2 222 596 | 68.0 | 1 950.6 |
| 1962 | 852 | 730 | 623 989 | 1 549 430 | 2 173 419 | 71.3 | 1 709.6 |
| 1963 | 839 | 683 | 599 212 | 1 550 287 | 2 149 499 | 72.1 | 1 641.7 |
| 1964 | 892 | 745 | 701 920 | 1 752 708 | 2 454 628 | 71.4 | 1 917.8 |
| 1965 | 889 | 748 | 786 050 | 2 004 068 | 2 790 118 | 71.8 | 2 153.6 |
| 1966 | 905 | 737 | 831 248 | 2 162 719 | 2 993 967 | 72.2 | 2 277.4 |
| 1967 | 911 | 752 | 887 572 | 2 288 271 | 3 174 843 | 72.1 | 2 431.7 |
| 1968 | 926 | 774 | 986 024 | 2 839 697 | 3 825 721 | 74.2 | 2 694.1 |
| 1969 | 923 | 754 | 985 981 | 3 091 398 | 4 077 379 | 75.8 | 2 701.3 |
| 1970 | 904 | 730 | 939 175 | 3 105 414 | 4 044 589 | 76.8 | 2 573.1 |
| 1971 | 900 | 695 | 890 622 | 3 463 885 | 4 354 507 | 79.5 | 2 440.1 |
| 1972 | 891 | 745 | 835 380 | 3 744 738 | 4 580 118 | 81.8 | 2 282.5 |
| 1973 | 882 | 687 | 807 882 | 3 983 740 | 4 791 622 | 83.1 | 2 213.4 |
| 1974 | 871 | 714 | 754 667 | 3 992 698 | 4 747 365 | 84.1 | 2 067.6 |
| 1975 | 831 | 686 | 701 459 | 3 974 389 | 4 676 848 | 85.0 | 1 921.8 |
| 1976 | 821 | 688 | 633 322 | 4 020 078 | 4 653 400 | 86.4 | 1 730.4 |
| 1977 | 804 | 701 | 630 466 | 4 226 135 | 4 856 601 | 87.0 | 1 727.3 |
| 1978 | 808 | 703 | 598 354 | 4 073 299 | 4 671 653 | 87.2 | 1 639.3 |
| 1979 | 811 | 706 | 583 377 | 3 945 337 | 4 529 714 | 87.1 | 1 598.3 |
| 1980 | 823 | 720 | 563 482 | 4 171 099 | 4 734 581 | 88.1 | 1 539.6 |
| 1981 | 853 | 748 | 542 695 | 4 565 210 | 5 107 905 | 89.4 | 1 486.8 |
| 1982 | 1 002 | 896 | 582 283 | 4 582 081 | 5 164 364 | 88.7 | 1 595.1 |
| 1983 | 1 160 | 1 041 | 736 934 | 5 079 646 | 5 816 580 | 87.3 | 2 019.0 |
| 1984 | 1 350 | 1 209 | 793 286 | 5 575 632 | 6 368 918 | 87.5 | 2 167.4 |
| 1985 | 1 505 | 1 366 | 820 729 | 5 685 409 | 6 506 138 | 87.4 | 2 248.6 |
| 1986 | 1 592 | 1 387 | 823 322 | 6 574 356 | 7 397 678 | 89.7 | 2 255.7 |
| 1987 | 1 624 | 1 434 | 781 806 | 6 317 251 | 7 099 057 | 89.0 | 2 141.9 |
| 1988 | 1 627 | 1 370 | 786 563 | 6 601 841 | 7 370 404 | 89.6 | 2 149.1 |
| 1989 | 1 581 | 1 353 | 722 820 | 6 607 461 | 7 330 281 | 90.0 | 1 980.4 |
| 1990 | 1 483 | 1 430 | 737 762 | 6 570 240 | 7 308 003 | 89.9 | 2 021.3 |
| 1991 | 1 567 | 1 408 | 712 792 | 6 703 450 | 7 416 242 | 90.4 | 1 952.8 |
| 1992 | 1 547 | 1 387 | 656 415 | 6 750 708 | 7 407 123 | 91.1 | 1 793.5 |
| 1993 | 1 563 | 1 394 | 634 561 | 6 189 214 | 6 823 775 | 90.7 | 1 738.5 |
| 1994 | 1 568 | 1 363 | 657 870 | 6 231 710 | 6 889 580 | 90.4 | 1 802.3 |
| 1995 | 1 556 | 1 354 | 642 650 | 5 831 904 | 6 474 554 | 90.1 | 1 760.7 |
| 1996 | 1 531 | 1 342 | 613 114 | 5 656 741 | 6 269 855 | 90.2 | 1 675.2 |
| 1997 | 1 535 | 1 337 | 636 681 | 5 729 013 | 6 365 694 | 90.0 | 1 744.3 |
| 1998 | 1 509 | 1 247 | 634 071 | 5 726 753 | 6 360 824 | 90.0 | 1 737.2 |
| 1999 | 1 494 | 1 246 | 581 206 | 5 428 067 | 6 009 273 | 90.3 | 1 592.3 |
| 2000 | 1 516 | 1 232 | 621 378 | 6 403 584 | 7 024 962 | 91.1 | 1 697.8 |
| **TOTAL** | – | – | **34 250 182** | **186 909 774** | **221 159 956** | – | – |

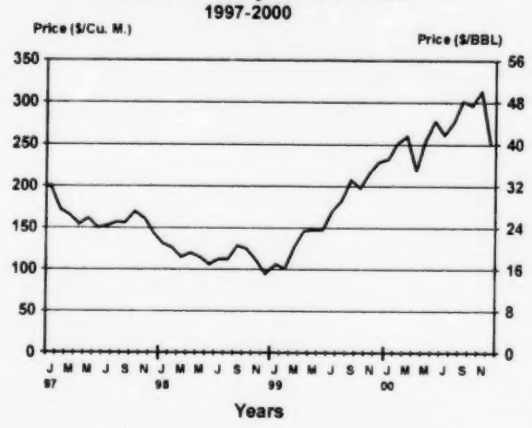
# Comparison of 2000 vs 1999 Oil Production by Field

| Field | 2000 | | 1999 | | 2000/1999 Increase (decrease) | |
|---|---|---|---|---|---|---|
| | $m^3$ | % of Total | $m^3$ | % of Total | $m^3$ | % Change |
| Daly | 120 486.8 | 19.4 | 115 407.8 | 19.9 | 5079.0 | 4.4 |
| Tilston | 18 896.0 | 3.0 | 27 360.1 | 4.7 | 8464.1 | (30.9) |
| Waskada | 73 509.7 | 11.8 | 76 548.1 | 13.2 | 3038.4 | (4.0) |
| Lulu Lake | 7 301.3 | 1.2 | 8 441.0 | 1.4 | 1139.7 | (13.5) |
| Virden | 204 080.7 | 32.8 | 193 674.2 | 33.3 | 10406.5 | 5.4 |
| Whitewater | 42 110.0 | 6.8 | 12 335.2 | 2.1 | 29774.8 | 241.4 |
| Pierson | 86 023.9 | 13.8 | 98 725.7 | 17.0 | (12701.8) | (12.9) |
| Kirkella | 32 565.0 | 5.2 | 15 830.4 | 2.7 | 16734.6 | 105.7 |
| Souris Hartney | 5 411.0 | 0.9 | 6 698.7 | 1.2 | (1287.7) | (19.2) |
| Coulter | 210.0 | 0.0 | 208.7 | 0.0 | 1.3 | 0.6 |
| Regent | 1 123.0 | 0.2 | 516.2 | 0.1 | 606.8 | 117.5 |
| Mountainside | 6 346.7 | 1.0 | 8 126.6 | 1.4 | (1779.9) | (21.9) |
| Birdtail | 7 480.2 | 1.2 | 7 013.3 | 1.2 | 466.9 | 6.7 |
| Other Areas | 15 833.5 | 2.5 | 10 340.2 | 1.8 | 5493.3 | 53.1 |
| **TOTAL** | **621377.8** | **100** | **581 226.2** | **100.0** | **40151.6** | **6.9** |

# Oil Prices

Manitoba's overall average crude oil selling price in 2000 increased 60% from 1999 to $266.16/m$^3$ ($42.30 Cdn. per barrel). The average monthly price was lowest in April at $218.92/m$^3$ ($34.79 Cdn. per barrel) and highest in November at $313.91/m$^3$ ($49.88 Cdn. per barrel).

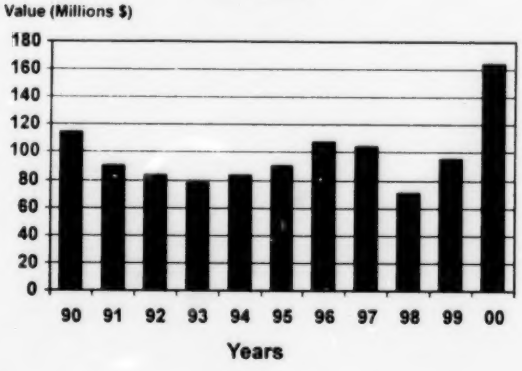
**Manitoba Monthly Crude Oil Prices 1997-2000**




# Value of Production

The total value of oil production during 2000 was $163.9 million, up 72% from 1999.

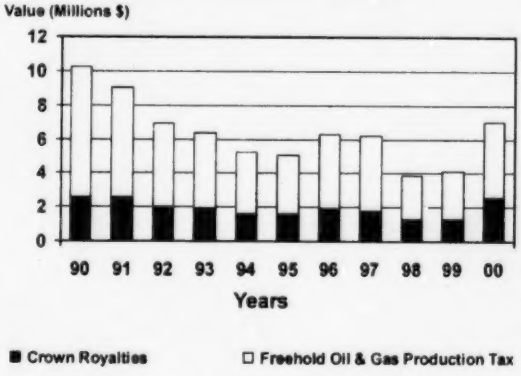
**Value of Production in Manitoba 1990-2000**




# Provincial Revenue from Oil Production

During 2000, the Manitoba government collected approximately $7.8 million in revenues ($2.5 million in Crown oil royalties, $4.5 million in freehold oil taxes, and $0.8 million Crown lease sale bonuses, rentals and fees), resulting in a 63% increase from 1999. These figures do not include provincial revenue from corporate capital tax, sales tax, and corporate and individual income tax.

**Crown Royalties and Taxes From Oil Production 1990-2000**



# Manitoba Crude Oil Production and Sales Value
# 1951-2000

1951-1975

| Year | Annual Production ($m^3$) | Cumulative Production ($m^3$) | Value of Sales (000's $) | Cumulative Value of Sales (Dec. 31) (000's $) | Average* Wellhead Price ($/$m^3$) | ($/bbl) |
|---|---|---|---|---|---|---|
| 1951 | 1 854 | 1 854 | 26 | 26 | 15.58 | 2.48 |
| 1952 | 17 022 | 18 876 | 229 | 255 | 13.77 | 2.24 |
| 1953 | 104 193 | 123 069 | 1,715 | 1,970 | 16.51 | 2.62 |
| 1954 | 341 410 | 464 479 | 5,620 | 7,590 | 16.46 | 2.62 |
| 1955 | 658 802 | 1 123 281 | 9,517 | 17,107 | 14.56 | 2.31 |
| 1956 | 919 539 | 2 042 820 | 13,418 | 30,524 | 14.61 | 2.32 |
| 1957 | 967 721 | 3 010 541 | 15,231 | 45,755 | 15.81 | 2.51 |
| 1958 | 926 322 | 3 936 863 | 14,265 | 60,020 | 15.40 | 2.45 |
| 1959 | 803 461 | 4 740 324 | 11,615 | 71,635 | 14.46 | 2.30 |
| 1960 | 757 054 | 5 497 378 | 10,690 | 82,325 | 14.16 | 2.25 |
| 1961 | 711 969 | 6 209 347 | 10,133 | 92,458 | 14.27 | 2.27 |
| 1962 | 623 989 | 6 833 336 | 9,500 | 101,958 | 15.12 | 2.49 |
| 1963 | 599 212 | 7 432 548 | 9,183 | 111,141 | 15.33 | 2.44 |
| 1964 | 701 920 | 8 134 468 | 10,694 | 121,835 | 15.31 | 2.43 |
| 1965 | 786 050 | 8 920 518 | 12,270 | 134,105 | 15.59 | 2.48 |
| 1966 | 831 248 | 9 751 766 | 13,087 | 147,192 | 15.73 | 2.50 |
| 1967 | 887 572 | 10 639 338 | 13,974 | 161,166 | 15.77 | 2.51 |
| 1968 | 986 024 | 11 625 362 | 15,561 | 176,727 | 15.79 | 2.51 |
| 1969 | 985 981 | 12 611 343 | 15,615 | 192,342 | 15.82 | 2.51 |
| 1970 | 939 175 | 13 550 518 | 14,848 | 207,200 | 15.80 | 2.51 |
| 1971 | 890 622 | 14 441 140 | 15,445 | 222,645 | 17.31 | 2.75 |
| 1972 | 835 380 | 15 276 520 | 14,586 | 237,231 | 17.46 | 2.77 |
| 1973 | 807 882 | 16 084 402 | 17,155 | 254,386 | 21.23 | 3.37 |
| 1974 | 754 667 | 16 839 069 | 27,182 | 281,568 | 36.00 | 5.72 |
| 1975 | 701 459 | 17 540 528 | 31,453 | 313,021 | 44.81 | 7.12 |

1976-2000

| Year | Annual Production ($m^3$) | Cumulative Production ($m^3$) | Value of Sales (000's $) | Cumulative Value of Sales (Dec. 31) (000's $) | Average* Wellhead Price ($/$m^3$) | ($/bbl) |
|---|---|---|---|---|---|---|
| 1976 | 633 322 | 18 173 850 | 33,533 | 346,554 | 52.99 | 8.42 |
| 1977 | 630 466 | 18 804 316 | 40,457 | 387,011 | 64.12 | 10.19 |
| 1978 | 598 354 | 19 402 670 | 45,953 | 432,964 | 76.77 | 12.20 |
| 1979 | 583 377 | 19 986 047 | 48,403 | 481,367 | 82.97 | 13.19 |
| 1980 | 563 482 | 20 549 529 | 54,958 | 536,325 | 97.57 | 15.51 |
| 1981 | 542 695 | 21 092 224 | 64,055 | 600,380 | 118.03 | 18.82 |
| 1982 | 582 283 | 21 674 507 | 100,537 | 700,917 | 173.57 | 27.58 |
| 1983 | 736 934 | 22 411 441 | 152,350 | 853,267 | 206.64 | 32.84 |
| 1984 | 793 286 | 23 204 727 | 169,296 | 1,022,563 | 214.04 | 34.02 |
| 1985 | 820 729 | 24 025 456 | 180,049 | 1,202,612 | 220.21 | 35.00 |
| 1986 | 823 322 | 24 848 778 | 95,337 | 1,297,949 | 114.66 | 18.23 |
| 1987 | 781 806 | 25 630 584 | 109,202 | 1,407,151 | 139.76 | 22.21 |
| 1988 | 786 563 | 26 417 147 | 78,660 | 1,485,811 | 102.26 | 16.25 |
| 1989 | 722 820 | 27 139 967 | 90,101 | 1,575,912 | 124.66 | 19.81 |
| 1990 | 737 762 | 27 877 729 | 114,805 | 1,609,717 | 155.85 | 24.78 |
| 1991 | 712 792 | 28 590 521 | 90,343 | 1,781,060 | 126.74 | 20.15 |
| 1992 | 656 415 | 29 246 936 | 86,289 | 1,867,349 | 131.46 | 20.89 |
| 1993 | 634 561 | 29 881 497 | 77,486 | 1,944,835 | 122.07 | 19.40 |
| 1994 | 657 870 | 30 539 367 | 83,620 | 2,028,455 | 126.76 | 20.14 |
| 1995 | 642 650 | 31 182 017 | 90,238 | 2,118,693 | 140.51 | 22.33 |
| 1996 | 613 114 | 31 795 131 | 107,245 | 2,225,938 | 173.90 | 27.63 |
| 1997 | 636 681 | 32 431 812 | 104,884 | 2,330,822 | 161.49 | 25.66 |
| 1998 | 634 071 | 33 065 883 | 70,730 | 2,401,552 | 116.97 | 18.54 |
| 1999 | 581 206 | 33 640 089 | 95,129 | 2,496,681 | 166.25 | 26.42 |
| 2000 | 621 378 | 34 268 467 | 163,933 | 2,660,614 | 266.16 | 42.30 |

* Average Wellhead Price = Value of Sales/Volume Sold

# Direct Revenues to Crown from Oil Exploration and Production in Manitoba*
# 1951-2000

| Year | Crown Royalties ($000's) | Freehold Oil Tax ($000's) | Crown Oil & Gas Rights Revenue ($000's) | Miscellaneous Fees ($000's) | Total Direct Revenue ($000's) |
|---|---|---|---|---|---|
| 1951 | 2 | – | 4 | 5 | 11 |
| 1952 | 7 | – | 7 | 9 | 23 |
| 1953 | 50 | 46 | 6 | 8 | 110 |
| 1954 | 156 | 64 | 106 | 24 | 350 |
| 1955 | 230 | 92 | 696 | 10 | 1,028 |
| 1956 | 318 | 83 | 668 | 18 | 1,087 |
| 1957 | 382 | 126 | 531 | – | 1,039 |
| 1958 | 356 | 137 | 293 | 31 | 817 |
| 1959 | 344 | 165 | 215 | 2 | 726 |
| 1960 | 313 | 130 | 102 | 2 | 547 |
| 1961 | 306 | 105 | 228 | 5 | 644 |
| 1962 | 298 | 96 | 116 | 10 | 520 |
| 1963 | 276 | 91 | 87 | 3 | 457 |
| 1964 | 307 | 86 | 157 | 23 | 573 |
| 1965 | 344 | 84 | 164 | 3 | 595 |
| 1966 | 353 | 96 | 154 | 3 | 606 |
| 1967 | 370 | 111 | 139 | 10 | 630 |
| 1968 | 411 | 116 | 99 | 14 | 640 |
| 1969 | 405 | 128 | 115 | 4 | 652 |
| 1970 | 377 | 143 | 43 | 1 | 564 |
| 1971 | 373 | 143 | 55 | 2 | 573 |
| 1972 | 348 | 138 | 16 | 1 | 503 |
| 1973 | 404 | 144 | 15 | 2 | 565 |
| 1974 | 1,599 | 5,216 | 15 | 4 | 6,834 |
| 1975 | 1,823 | 6,498 | 12 | 1 | 8,334 |
| 1976 | 2,024 | 6,128 | 11 | 11 | 8,174 |
| 1977 | 2,263 | 7,012 | 10 | 3 | 9,288 |
| 1978 | 2,281 | 8,018 | 10 | 6 | 10,315 |
| 1979 | 2,280 | 8,769 | 988 | 12 | 12,049 |
| 1980 | 2,575 | 9,159 | 2,012 | 11 | 13,757 |
| 1981 | 2,715 | 10,022 | 1,846 | 12 | 14,595 |
| 1982 | 3,176 | 11,947 | 1,292 | 28 | 16,443 |
| 1983 | 4,111 | 14,825 | 1,347 | 59 | 20,342 |
| 1984 | 4,238 | 15,642 | 2,466 | 67 | 22,413 |
| 1985 | 4,323 | 14,977 | 4,522 | 90 | 23,912 |
| 1986 | 2,570 | 8,179 | 1,195 | 53 | 11,997 |
| 1987 | 2,740 | 8,649 | 855 | 55 | 12,299 |
| 1988 | 2,034 | 5,861 | 639 | 40 | 8,574 |
| 1989 | 2,273 | 6,757 | 364 | 37 | 9,431 |
| 1990 | 2,578 | 7,662 | 266 | 35 | 10,541 |
| 1991 | 2,567 | 6,438 | 213 | 37 | 9,255 |
| 1992 | 1,978 | 4,938 | 209 | 21 | 7,146 |
| 1993 | 1,884 | 4,501 | 1,005 | 41 | 7,431 |
| 1994 | 1,581 | 3,620 | 1,415 | 44 | 6,660 |
| 1995 | 1,618 | 3,480 | 2,860 | 43 | 8,001 |
| 1996 | 1,866 | 4,450 | 2,024 | 51 | 8,391 |
| 1997 | 1,806 | 4,431 | 6,335 | 55 | 12,627 |
| 1998 | 1,259 | 2,579 | 752 | 30 | 4,620 |
| 1999 | 1,286 | 2,751 | 764 | 18 | 4,819 |
| 2000 | 2,537 | 4,488 | 783 | 21 | 7,829 |
| **TOTAL** | **70,715** | **199,321** | **38,226** | **1,075** | **309,337** |

* Does not include corporate capital tax, sales tax or corporate and individual income tax. All figures are based on calendar year receipts.

# Surface Owners

Prior to drilling a well, an oil company is required to negotiate a surface lease, which provides right of entry, with the landowner. The typical surface lease includes a first-year bonus payment and a subsequent annual rental for the duration of the lease.

Where the landowner is renting the land to another party, the oil company must obtain the consent of both the landowner and the occupant.

After a lease has been signed, the landowner and occupant then determine what share of the compensation paid by the oil company each receives.

An estimated $3.7 million was paid by oil companies to landowners in the form of first-year bonuses and annual rental fees.

Disputes relating to right-of-entry or compensation are referred to the Surface Rights Board. The Board's principal function is to arbitrate disputes between the petroleum industry and landowners regarding use of land for exploration, development and related operations, and to determine what compensation should be paid to the landowner.

The Minister of Intergovernmental Affairs is responsible for the administration of The Surface Rights Act. The Board's office is located in Brandon.

# Spills and Rehabilitation

Accidental spills of oil and salt water occasionally result from oil industry operations. Regulations require land damaged by oil and salt water spills to be fully rehabilitated by the responsible operator. Sites used for wells or other production facilities must also be fully rehabilitated when the well or facility is abandoned.

In 2000, 49 spills involving a total volume 366.1 $m^3$ occurred. The volume of fluid spilled is equal to 0.005 percent of the total volume of oil and salt water produced.

Activities by industry resulted in 94 abandoned well and spill sites becoming fully rehabilitated in 2000. Further rehabilitation is required on 528 spill sites and abandoned wellsites.

# Municipal Taxes

Oil producers in Manitoba pay municipal taxes on production facilities, including: oil wells, batteries, salt water disposal wells, salt water disposal plants and water injection wells.

The portioned municipal tax assessment on these facilities for the calendar year 2000 was approximately $39.4 million dollars.

Actual tax revenue from these assessments should amount to approximately $2.3 million for municipalities with oil and gas facilities.

# Manitoba Drilling Incentive Program (1992-2004)

The Manitoba Drilling Incentive Program provides eligible wells a royalty/tax free "holiday volume."

Highlights of the program include:

- a special new formation incentive of 50 000 $m^3$ for each well that is the first to produce from each deeper non-productive formation.
- greater benefit for exploratory wells drilled into existing producing formations.
- flexibility in the allocation of earned "holiday volumes."
- holiday oil volume of 500 $m^3$ for any marginal wells on which a major workover is conducted.

Effective January 1, 1993 a horizontal well is eligible for a 10 000 $m^3$ holiday volume.

Effective April 1, 2000 a reduction in Crown oil royalty and freehold oil production tax was implemented for vertical wells, reactivated wells and new EOR projects.

Under the new Third Tier status, Crown royalty rates are reduced by an average of 14.5% and freehold oil production tax rates by 44%.

A total of 56 wells received a holiday volume in 2000 to bring the total number of wells with a holiday oil volume in the program to 158.

Detailed information on the program is available from the Petroleum Branch.

# Oil Reserves

As of December 31, 1999, total and remaining proved developed reserves in Manitoba were 37.4 $10^6 m^3$ and 3.78 $10^6$ $m^3$, respectively. In 2000, oil production totalled 621.4 $10^3 m^3$, up 7% from 1999. Average daily production for 2000 was 1 698 $m^3/d$, with exit year production of 1 737 $m^3/d$. Reserve additions for 2000 were not available at the time of publication. Preliminary reserve assessments for 2000 indicate reserve additions in the Whitewater, Kirkella and Regent field, and the Goodlands and Deloraine areas.

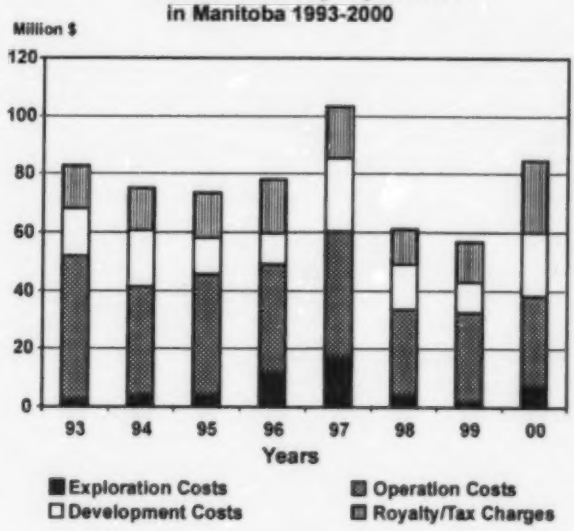
Later this year the Branch will be releasing a new publication entitled "Manitoba Reservoir Annual 2000". The report will include oil-in-place, production and reserves data for the majority of the province's 161 designated oil pools.

# Industry Expenditures

It is estimated that industry spent $84.8 million in 2000 compared with $57.0 million in 1999. The total expenditures can be broken down into seven categories: exploration, development, land, producing costs, royalties, abandonment and reclamation, and other costs.

- The exploration component, which includes, exploratory drilling costs, geophysical and geological work, amounted to approximately $7.5 million.
- Development costs, which include development drilling, workovers, recompletions and production facility construction accounted for approximately $21.7 million.
- Land costs include freehold and Crown mineral and surface rights acquisition costs, fees and rentals. The total estimated expenditures in this component amounted to $6.7 million.
- Production costs were estimated at $20.6 million and include well and facility operating costs.
- Royalties and Production taxes including freehold royalties, Crown royalties and freehold production taxes, are estimated at approximately $24.9 million.
- Costs associated with abandonment of wells and rehabilitation of sites damaged by oil field operations totalled approximately $1.1 million.
- Other costs include municipal taxes and miscellaneous expenditures, totaling approximately $2.3 million.

**Petroleum Industry Expenditure in Manitoba 1993-2000**




*Operation costs include production costs, land costs, abandonment costs, and other costs.

# Industry Employment

Direct employment in the petroleum industry during 2000 was approximately 300-350 person years. Of this total, approximately 20 percent is attributed to geophysical and drilling activity, while the remaining 80 percent is associated ongoing operation and maintenance of existing facilities.

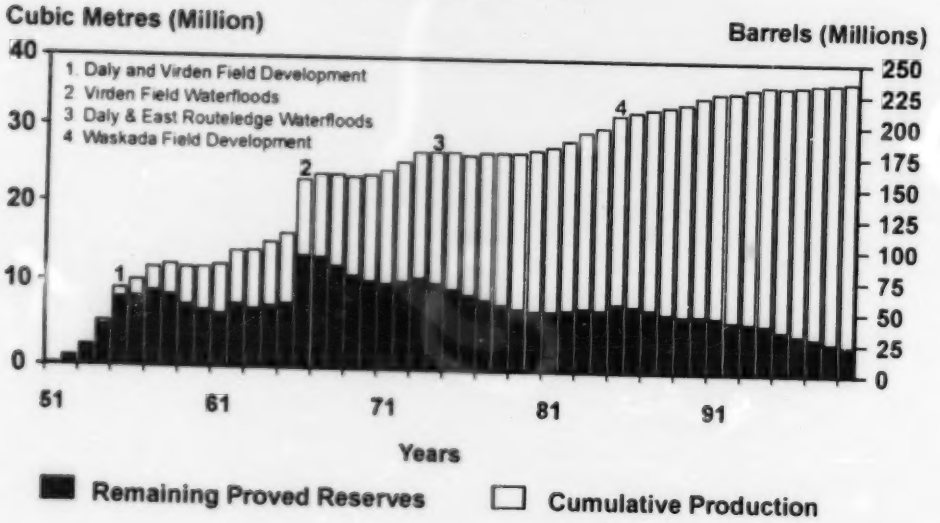
In addition, there are indirect jobs created as a result of petroleum industry activity. For every direct job in the petroleum industry it is estimated that 1.2 indirect jobs are created. This results in another approximately 390 person years of indirect employment.

# Crude Oil Reserves in Manitoba, 1974-1999

| Year | Production ($m^3$) | Proved Reserve Additions($m^3$) | Remaining Proved Reserves ($m^3$) | Life Index* |
|---|---|---|---|---|
| 1974 | 754 667 | 15 000 | 11 059 000 | 14.65 |
| 1975 | 701 459 | 4 000 | 10 362 000 | 14.77 |
| 1976 | 633 322 | 7 000 | 9 735 000 | 15.37 |
| 1977 | 630 466 | 15 000 | 9 120 000 | 14.46 |
| 1978 | 598 354 | 22 000 | 8 543 000 | 14.28 |
| 1979 | 583 377 | 24 000 | 7 984 000 | 13.64 |
| 1980 | 563 482 | 314 000 | 7 735 000 | 13.73 |
| 1981 | 542 695 | 544 000 | 7 736 000 | 14.25 |
| 1982 | 582 322 | 733 000 | 7 927 000 | 13.60 |
| 1983 | 736 934 | 954 000 | 8 154 000 | 11.06 |
| 1984 | 793 284 | 663 000 | 8 024 000 | 10.11 |
| 1985 | 820 729 | 1 628 000 | 8 831 000 | 10.76 |
| 1986 | 823 322 | 439 000 | 8 447 000 | 10.26 |
| 1987 | 781 806 | 401 000 | 8 066 000 | 10.32 |
| 1988 | 768 563 | 343 000 | 7 650 000 | 9.95 |
| 1989 | 722 820 | 353 000 | 7 284 000 | 10.08 |
| 1990 | 737 762 | 865 600 | 7 412 000 | 10.05 |
| 1991 | 712 792 | 515 000 | 7 214 200 | 10.12 |
| 1992 | 656 415 | 137 600 | 6 695 000 | 10.20 |
| 1993 | 634 561 | 429 800 | 6 492 000 | 10.23 |
| 1994 | 657 870 | 468 900 | 6 301 700 | 9.58 |
| 1995 | 642 650 | -97 200 | 5 562 100 | 8.60 |
| 1996 | 613 114 | 128 800 | 5 077 700 | 8.30 |
| 1997 | 636 726 | 258 000 | 4 699 000 | 7.40 |
| 1998 | 634 173 | 111 600 | 4 176 300 | 6.60 |
| 1999 | 581 226** | 180 100 | 3 775 200 | 6.50 |

* Remaining Proved Reserves divided by Annual Production.
** Reflects post-1999 amendments to production.

## Manitoba Established Oil Reserves (History) 1951-1999



# Manitoba Oil Fields - 2000

| | Daly | Tilston | Waskada | Lulu Lake | Virden | White-Water | Pierson | Kirkella | Souris Hartney | Coulter | Regent | Mountain-side | Birdtail | Other Areas | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Discovery Year | 1951 | 1952 | 1952 | 1953 | 1953 | 1953 | 1954 | 1957 | 1962 | 1952 | 1955 | 1982 | 1996 | --- | --- |
| Avg. Depth to Producing Formation (m) | 835 | 940 | 918 | 1 005 | 634 | 782 | 1 003 | 734 | 655 | 968 | 767 | 895 | 522 | 858 | --- |
| Producing Formation | L/B | MC | MC/LAm | L | L | LAm/L | MC/LAm | L | L | MC/LAm | L | L | B | LAm MC/L | --- |
| Well Spacing (ha) | 32/16/8 | 16 | 16/4 | 16 | 16/8 | 16 | 32/16 | 16 | 32 | 16 | 16 | 16 | 16 | 16 | --- |
| Active Oil Wells 2000* | 334 | 22 | 235 | 4 | 461 | 33 | 137 | 35 | 5 | 3 | 6 | 13 | 18 | 26 | 1332 |
| 2000 Oil Prod. (`000 $m^3$) | 120.5 | 18.9 | 73.5 | 7.3 | 204.1 | 42.1 | 86.0 | 32.6 | 5.4 | 0.2 | 1.1 | 6.3 | 7.5 | 15.8 | 621.3 |
| Cum. Oil Prod. (Dec. 31, 2000) (`000 $m^3$) | 5 837.2 | 359.8 | 3 258.4 | 94.8 | 22 023.1 | 316.7 | 1 506.4 | 363.9 | 197.8 | 15.6 | 44.2 | 90.0 | 31.1 | 110.6 | 34 249.8 |
| Remaining ** Established Reserves (Dec. 31, 2000) (`000 $m^3$) | 769.6 | 27.2 | 420.2 | 11.1 | 1 362.6 | 37.8 | 358.9 | 27.7 | 13.0 | 0.1 | 0.6 | 37.0 | 10.0 | 24.2 | |

L = Lodgepole
LAm = Lower Amaranth
MC = Mission Canyon
B = Bakken

* Wells classified as capable of oil production at year-end that produced oil in 2000. Dual completions or commingled wells count as one well. Confidential wells not included.
** Does not include 2000 reserve additions.